21020-040250T1

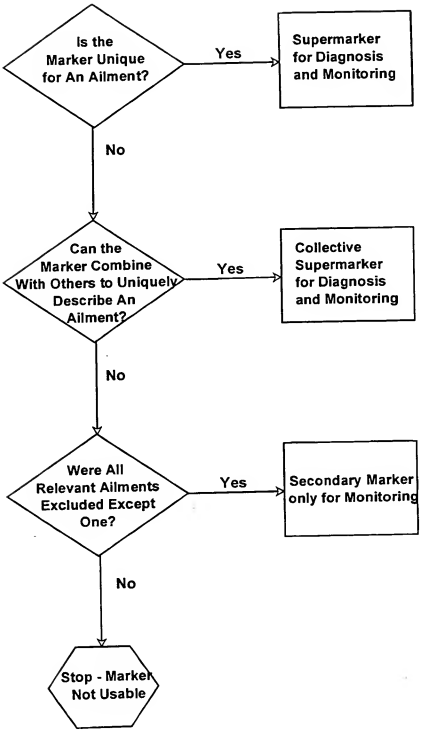

Figure 1

20020507 6H07800T

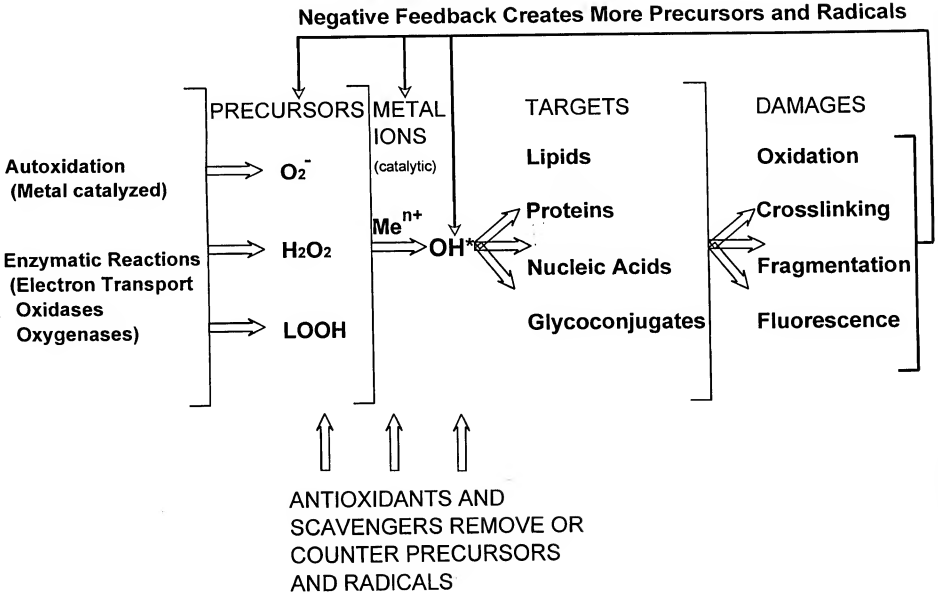

Figure 2

20020218-6A0-2001

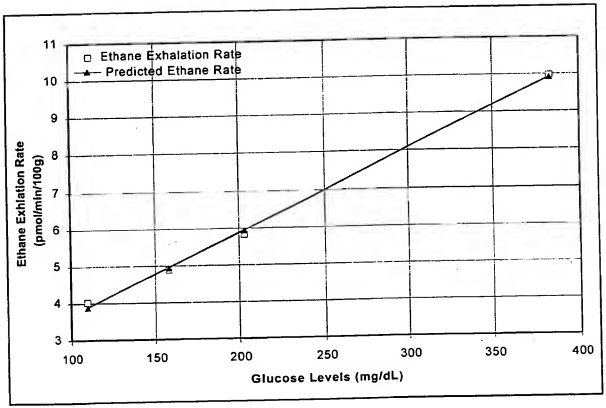

Figure 3

10050749.030202

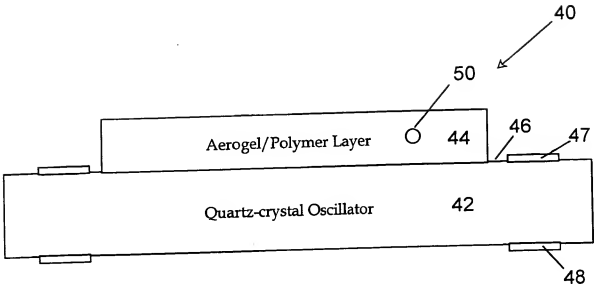

Figure 4

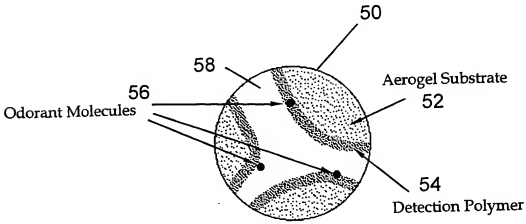

Figure 5

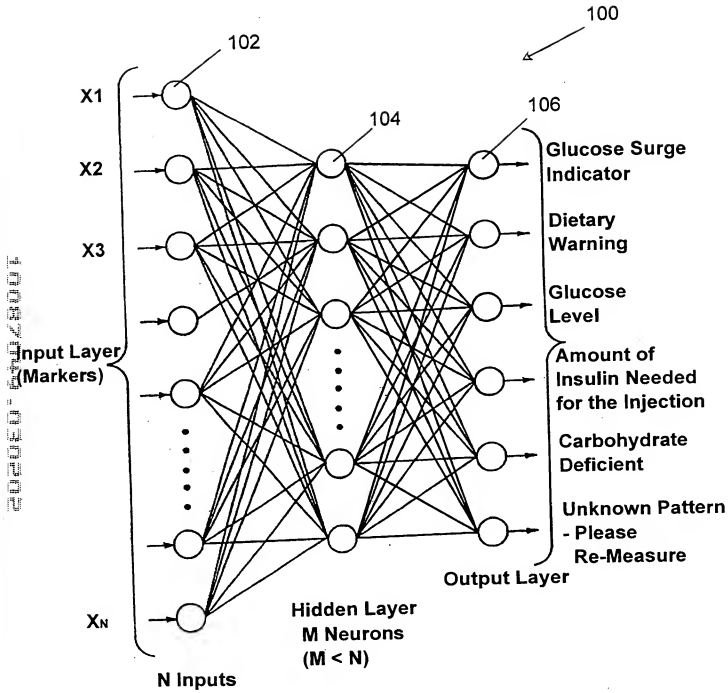
100
102
104
106
X1
X2
X3
Input Layer
(Markers)
X_N
N Inputs
Hidden Layer
M Neurons
(M < N)
Glucose Surge
Indicator
Dietary
Warning
Glucose
Level
Amount of
Insulin Needed
for the Injection
Carbohydrate
Deficient
Unknown Pattern
- Please
Re-Measure
Output Layer

Figure 6

1008704-050202

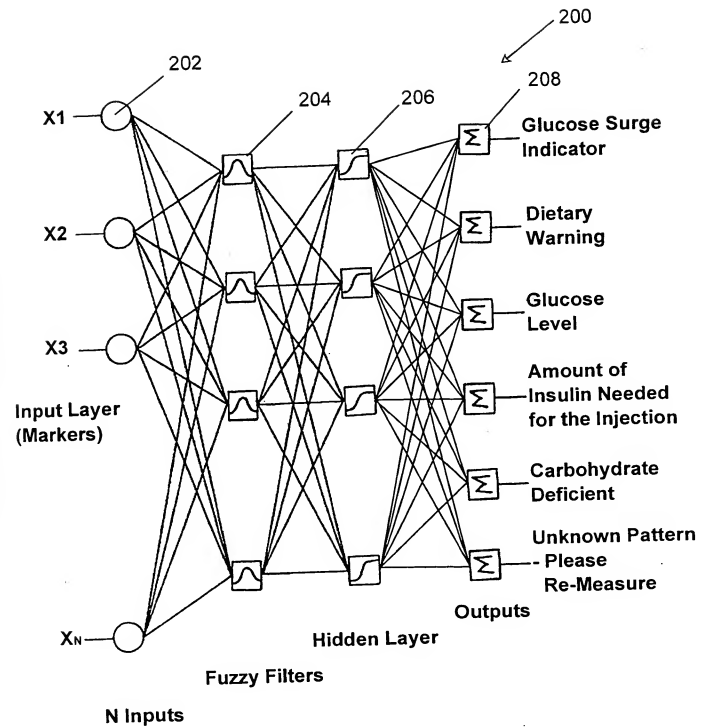

Figure 7

20050049702A1

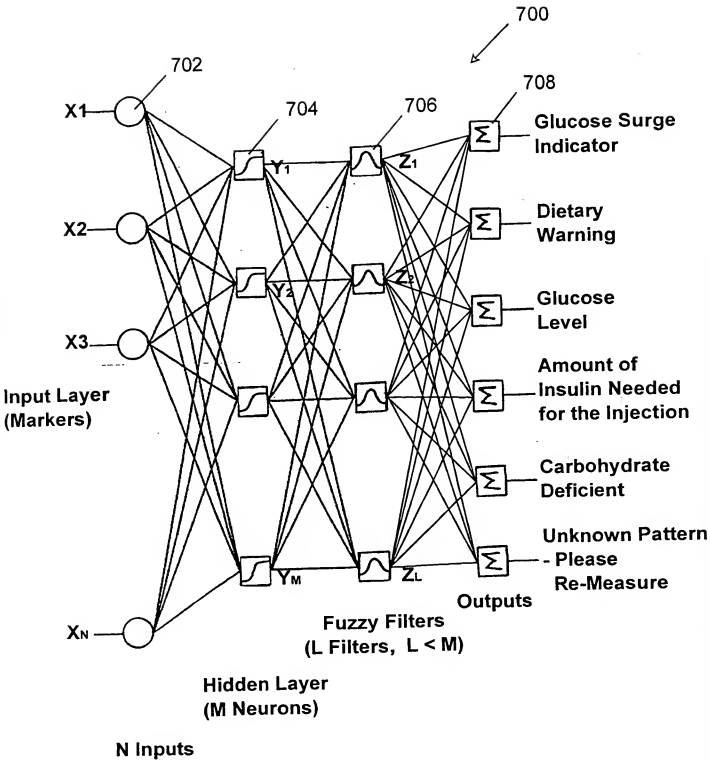

Figure 8

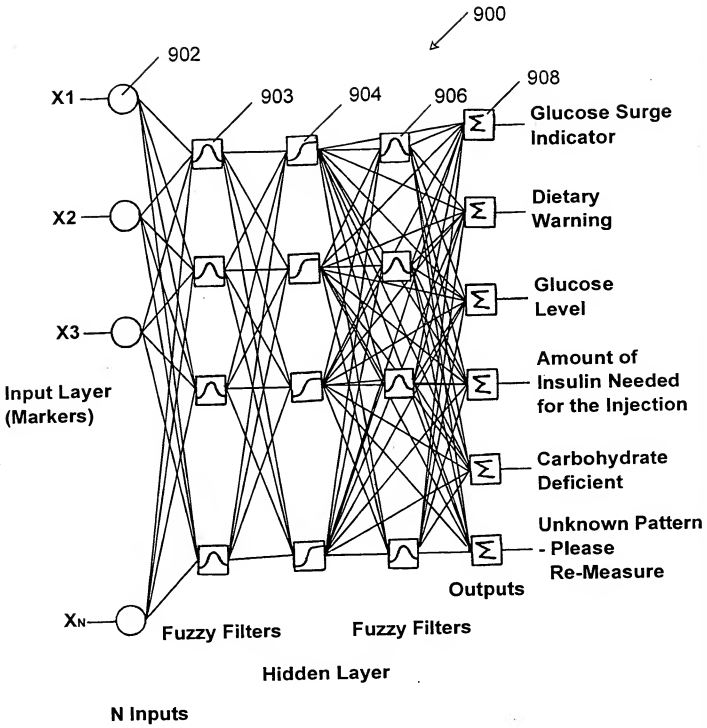
900
902
X1
X2
X3
XN
903
904
906
908
Glucose Surge Indicator
Dietary Warning
Glucose Level
Amount of Insulin Needed for the Injection
Carbohydrate Deficient
Unknown Pattern - Please Re-Measure
Input Layer (Markers)
Fuzzy Filters
Fuzzy Filters
Hidden Layer
Outputs
N Inputs

Figure 9

20050816-US20050182307A1

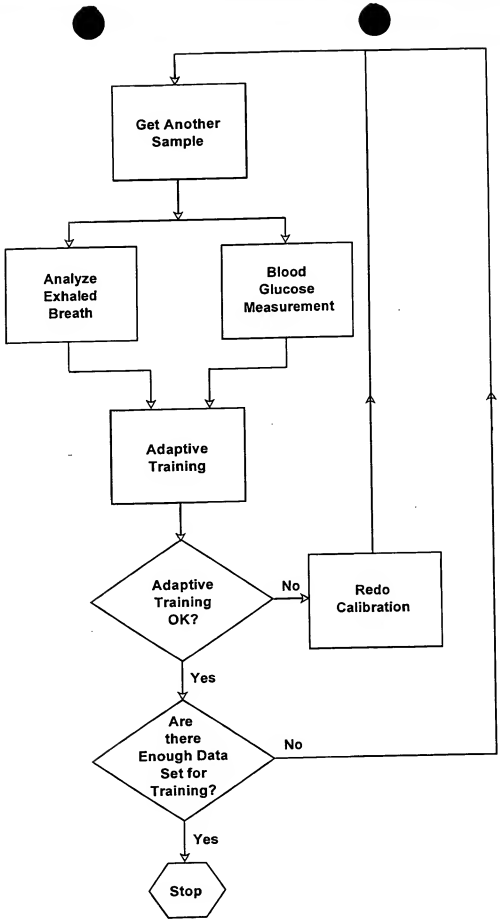

Figure 10

20020E0 6n0Z800T

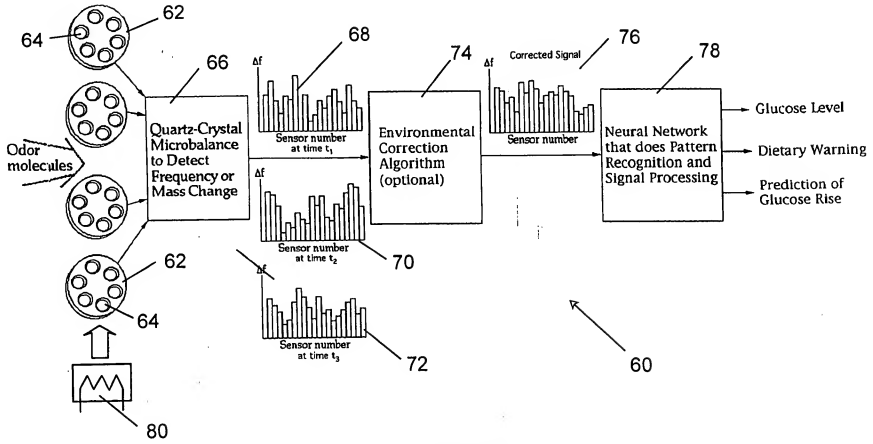

Figure 11

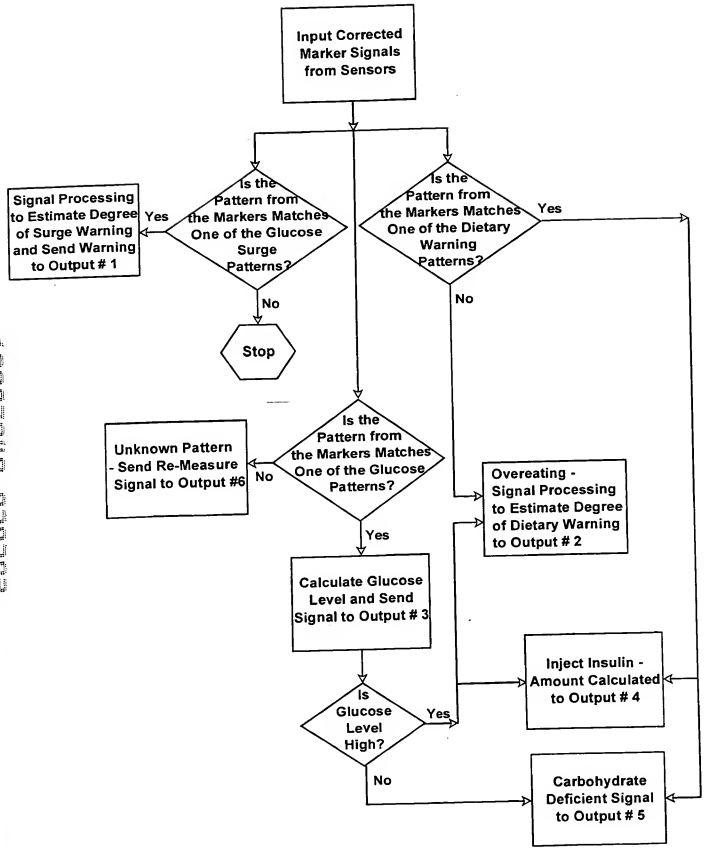
Input Corrected Marker Signals from Sensors
Is the Pattern from the Markers Matches One of the Glucose Surge Patterns?
Yes
Signal Processing to Estimate Degree of Surge Warning and Send Warning to Output # 1
No
Stop
Is the Pattern from the Markers Matches One of the Dietary Warning Patterns?
Yes
No
Is the Pattern from the Markers Matches One of the Glucose Patterns?
No
Unknown Pattern - Send Re-Measure Signal to Output #6
Yes
Overeating - Signal Processing to Estimate Degree of Dietary Warning to Output # 2
Calculate Glucose Level and Send Signal to Output # 3
Is Glucose Level High?
Yes
Inject Insulin - Amount Calculated to Output # 4
No
Carbohydrate Deficient Signal to Output # 5

Figure 12

20020E0 .6HO7800T

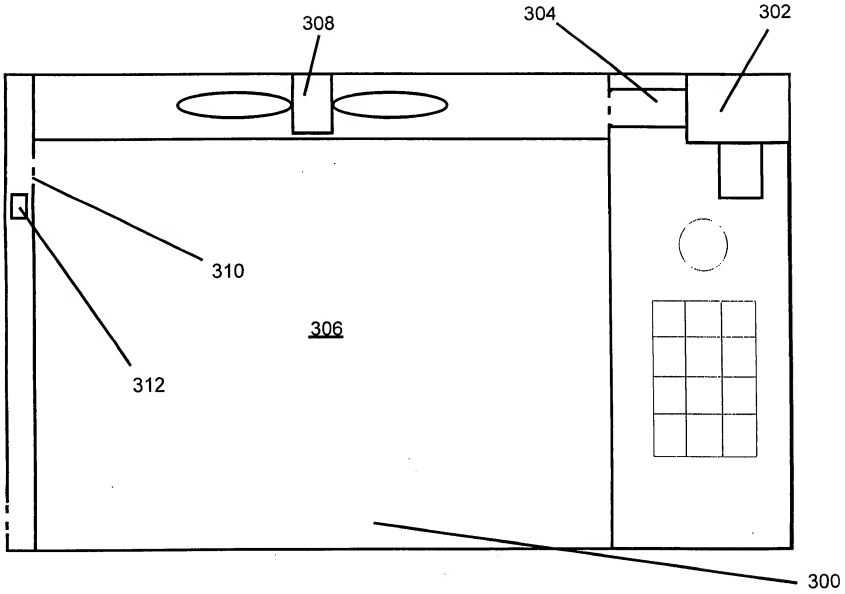

Figure 13